

The claims remaining in the application are 11, and 13-19.

REMARKS

The Applicants greatly appreciate the very quick and courteous Office Action.

Objection to the Disclosure

The disclosure is objected to because of the following informalities: In the specification on page 4, line 12 "anionic polymer" appears to be erroneous and should be changed to - additive.

The Applicants greatly appreciate the Examiner pointing out this informality and would respectfully direct the Examiner's attention to the amendment to paragraph [0013] herein where a correction has been made exactly as the Examiner helpfully suggested has been made. Thus, it is respectfully submitted that the Examiner's objection to the specification has been overcome. The Examiner will note that a number of other inadvertent typographic errors have been corrected in the specification as well. All of these changes were made to correct inadvertent clerical errors and not for any reason substantially related to patentability. Reconsideration is respectfully requested.

35 U.S.C. §112, Second Paragraph, Rejection

The Examiner has rejected claims 12, 14, 17 and 18 under 35 U.S.C. §112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In claims 12 and 17 "the treated onium compound", "the amount of the additive", and "the toxicity", and in claims 15 and 18 "the effective amount" lack clear antecedent basis. In claims 14 and 17 "preferably" is vague and indefinite because it is unclear how this term further limits.

The Applicants greatly appreciate the Examiner pointing out these concerns.

The Applicants would respectfully note that dependent claim 12 has been cancelled and the recitations therefrom incorporated into independent claim 11. The Applicants would further respectfully direct the Examiner's attention to claims 11 and 17

where the word "treated" is no longer used prior to the term "onium compound". Further, the Examiner's attention is directed to the fact that the term "the amount of the additive" has been changed in these claims to "an amount of the additive" in claims 11 and 17. Additionally in these claims the phrase "the toxicity" has been changed to "toxicity". Also, in dependent claims 15 and 18 the word "effective" has been deleted. Finally, in independent claims 14 and 17, the phrase "preferably those" has been deleted.

It is respectfully submitted that these changes correct any and all clarity concerns the Examiner had with the claims, as well as resolve any antecedent basis concerns of the Examiner. Thus, it is respectfully submitted that all of the points of rejection are overcome herein. These changes were made to correct inadvertent clerical errors and were not made for any substantial reason related to patentability. Reconsideration is respectfully requested.

35 U.S.C. §102(b) Rejection

The Examiner rejected claims 11-14 under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Pat. No. 4,204,954 to Jacob. The Examiner submits that the water treated in Jacob comprises water, at least one onium compound, and at least one additive as recited in the instant claims.

The Applicants would respectfully traverse.

A patent claim is anticipated, and therefore invalid, only when a single prior art reference discloses each and every limitation of the claim. *Glaxo Inc. v. Novopharm Ltd.*, 52 F.3d 1043, 1047, 34 U.S.P.Q.2d 1565 (Fed. Cir.), cert. denied, 116 S.Ct. 516 (1995).

The Applicants would respectfully note that independent claim 11 has been amended to additionally recite "where the onium compound partitions into a non-aqueous phase, and where an amount of the additive is sufficient to reduce toxicity of the aqueous solution as compared with an identical aqueous solution having an absence of the additive". Support for this recitation is found in dependent claim 12 as filed (now cancelled) and thus does not constitute an improper insertion of new matter.

It is respectfully submitted that this language permits claims 11 and 13-14 to be allowed for substantially the same reason that the claims in the parent application were

allowed. That reason, stated by the same Examiner as the Examiner herein, in the Notice of Allowance in Application No. 10/029,187 dated 11/03/2003, was as follows:

The primary reason for allowance of the claims is that the prior art of record fails to teach or suggest a method of reducing the toxicity of at least one onium compound in an aqueous solution comprising adding to the solution an amount of the additive to reduce the toxicity of the onium compound, where the onium compound partitions into a non-aqueous phase, and removing the non-aqueous phase from the aqueous solution, as recited in the instant claims.

It is respectfully submitted that the claims allowed by the Examiner's reason for allowance differ from the instant claim 11 by the fact that the non-aqueous phase is not removed from the aqueous solution. However, it is respectfully submitted that Jacob (also of record in the parent application) does not teach or suggest a non-aqueous phase, or the fact that onium compound would be or does partition into it. Consequently, the Applicants respectfully submit that the single prior art reference does not disclose each and every limitation of the claim, and thus the claims as amended are not anticipated by Jacob. It is respectfully submitted that these amendments and arguments overcome the rejection; reconsideration is respectfully requested.

35 U.S.C. §103(a) Rejection Based on Jacob

The Examiner has rejected dependent claim 15 under 35 U.S.C. §103(a) as allegedly being unpatentable over Jacob for reason of obviousness.

The Examiner admits that the claim differs from Jacob as applied above by reciting that the amount of additive ranges in a specific weight ratio. The Examiner submits that the amount of additive utilized in Jacob is considered to be allegedly patentably indistinguishable from the weight ratio recited in the instant claim. The Examiner contends that it would have been obvious to one skilled in the art to modify the aqueous solution of Jacob by utilizing the recited weight ratio to aid in reducing the toxicity of the onium compound in the solution. The Examiner further alleges that the specific weight ratio utilized would have been an obvious matter of process optimization depending on the specific use for the aqueous solution and results desired, absent a sufficient showing of unexpected results.

The Applicants must respectfully traverse.

To support an obviousness rejection, the Examiner has the initial burden of establishing a *prima facie* case of obviousness of the pending claims over the cited prior art, *In re Oeticker*, 977 F.2d 1443, 1445; 24 U.S.P.Q.2d 1443 (Fed. Cir. 1992).

The Applicants would respectfully submit that dependent claim 15 is allowable over Jacob for the same or similar reason that amended claim 11 (and other claims dependent thereon) is allowable over Jacob. Claim 15 by virtue of its dependency on claim 11 recites that the onium compound partitions into a non-aqueous phase. Jacob does not teach or suggest a non-aqueous phase. Because Jacob does not teach or suggest a non-aqueous phase, it cannot teach or suggest that the onium compound partitions into a non-aqueous phase.

"Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, '[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.' " *In re Laskowski*, 871 F.2d 115, 10 U.S.P.Q.2d 1397 (Fed. Cir. 1989)

"The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260, 1266; 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992).

It is respectfully submitted that Jacob does not suggest or teach or hint at the desirability of adding a non-aqueous phase to his composition. Therefore Applicants respectfully submit that a *prima facie* obviousness rejection has not been made for claim 15 over Jacob. It is respectfully submitted that the amendments to independent claim 11, from which claim 15 depends, and the arguments above, overcome the 35 U.S.C. §103 rejection. Reconsideration is respectfully requested.

35 U.S.C. §103(a) Rejection Based on Jacob in view of Petrille III, et al.

The Examiner has rejected claims 16-19 under 35 U.S.C. §103(a) as allegedly being unpatentable over Jacob as above in further view of U.S. Pat. No. 5,518,636 to Petrille III, et al. for reason of obviousness. The Examiner admits that the claims differ from Jacob as applied above by reciting that the aqueous solution comprises a non-aque-

ous phase. The Examiner contends that Petrille III, et al. disclose that it is known in the art to add lecithin, which is insoluble in water, to an aqueous solution to aid in reducing the toxicity of quaternary ammonium compounds in the solution. The Examiner thus contends that it would have been obvious to one skilled in the art to modify the aqueous solution of Jacob by including a non-aqueous phase in view of the teachings of Petrille III, et al. to aid in reducing the toxicity of the onium compound in the solution.

Again, the Applicants must respectfully traverse. It is respectfully submitted that again the Examiner has not made a *prima facie* obviousness rejection based on Jacob in view of Petrille III, et al. More specifically, it is respectfully submitted that Petrille III, et al. does not teach what the Examiner supposes it does.

Petrille III, et al. in column 3, lines 24-33 teaches:

Typically, soya lecithin is sold as a liquid that contains a small proportion of residual soybean oil that renders the product insoluble in water. *De-oiled lecithin is derived by removing the majority of residual oil leaving only 1 to 2% oil remaining.* This produces a granule or powder that is *water dispersible* forming a stable colloidal suspension. Thus, *de-oiled lecithin can be described as a phosphatide mixture with about 2% or less residual oil.* (Emphasis added.)

Because Petrille III, et al. only teaches the use of *de-oiled* lecithin, which is explicitly taught by the reference to be water dispersible, it is respectfully submitted that Petrille III, et al. does not, in fact, teach an aqueous solution that comprises a non-aqueous phase. The Examiner's attention is further respectfully directed to the Abstract, Summary of the Invention (column 2, line 67 to column 3, line 9) and claim 1 which are consistent with this understanding of Petrille III, et al. For this reason alone, it is respectfully submitted that the Examiner has not made a *prima facie* obviousness rejection under 35 U.S.C. §103.

Furthermore, it is additionally respectfully submitted that even if a non-aqueous phase was present in or taught as part of the aqueous solution in Petrille III, et al. (and the Applicants are *not* conceding that it is), there is no teaching in Petrille III, et al., or in Jacob, or in the combination of the two, that the onium compound partitions or would partition into the aqueous phase. References may not be properly combined if there is no

suggestion in any reference that they can be combined to give the applicant's result, *In re Shaffer*, 108 U.S.P.Q. 326 (C.C.P.A. 1956).

The Federal Circuit has held that, in order for an invention to be obvious over the prior art, two things must be found in the prior art, and not in the Appellants' disclosure — (1) the suggestion of the invention, and (2) the expectation of its success. *In re Vaeck*, 947 F.2d 488, 493; 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991). As established above, there is no suggestion of the Applicant's invention in Petrille III, et al. or Jacob or the combination of the two because Petrille III, et al. does not teach or suggest including a non-aqueous phase in an aqueous solution. Furthermore, there is no expectation of the success of the invention, *i.e.* the partitioning of the onium compound into the non-aqueous phase or a reduction of toxicity, in either reference taken separately or together. Thus, for this second reason alone, it is respectfully submitted that a proper *prima facie* obviousness rejection has not been made. Reconsideration of the claims is respectfully requested.

It is respectfully submitted that the amendments and arguments presented above place the claims in condition for allowance for at least the reasons in the parent application. Reconsideration and allowance of the claims are respectfully requested. The Examiner is respectfully reminded of his duty to indicate allowable subject matter. The Examiner is invited to call the Applicants' attorney at the number below for any reason, especially any reason that may help advance the prosecution.

Respectfully submitted,
GORDON T. RIVERS, et al.



David L. Mossman
Registration No. 29,570
Attorney for Applicants
Telephone No. 512/219-4026
Facsimile No. 512/219-4036

Madan, Mossman & Sriram, P.C.
2603 Augusta, Suite 700
Houston, TX 77057-5638